

OPEN LETTER ON DENNIS' MIGRATION ARTICLE

By Chandler S. Robbins

(Laurel, Md.)

Dear John: I read with interest your article on *The Role of Light Intensities in Bird Migration*, in the July-August 1957 issue of EBBA NEWS. You have brought up some interesting points for discussion.

It seems to me that your major premise that the visual test with mist nets "signifies wide differences in vision among different species and different groups" is not supported by direct evidence. I believe that by citing a few examples based on the use of mist nets I can show that placing of the nets (with respect to background and direct sunlight) and the feeding habits of the birds themselves could account for all the "differences in vision" that you attribute to various species and groups. I do not mean to imply that structural or psychological differences do not exist; I simply believe that you have not given any real evidence in support of your hypothesis.

We all know that mist nets are most effective when (1) placed in the shade; (2) camouflaged by a background of trees, shrubs, weeds or a dark-colored object such as an unpainted barn; and (3) sheltered from the wind. A net running lengthwise on the shady side of a hedgerow, for instance, will catch birds flying toward the hedgerow, but will not work so effectively for birds leaving the hedgerow; in the latter instance the net is silhouetted against the sky and is readily visible. You state that "most birds of very open country...are difficult to take in nets." Yet, on a calm day with the proper background and no direct sunlight (the same conditions that are favorable for trapping woodland species) open country birds can be caught quite readily. The American Pipit is a typical open country bird; I have netted 106 of these in four days in the early morning in a marshy area with tall weeds for background.

You say that "terns, shorebirds and the black skimmer appear to be very keen sighted and able to adjust their vision to a variety of situations." I find that these birds can be netted just as effectively as sparrows and warblers if the operator is able to approximate similar concealment of the nets. When netting in fairly open areas that are inhabited by both sparrows and shorebirds I get by far my greatest catch of both groups at dawn and dusk when the nets are not plainly visible against the sky; when either sparrows or shorebirds are taken in any numbers when the sun is shining on the net it is generally because they are flying directly toward the rising or setting sun and are blinded just as you or I are when driving directly toward the sun. Skimmers also can be caught readily when poor illumination conceals nets set out in the open. In fact, nets are a definite hazard to black skimmers if set over open water at night; night sets should never be left unattended when strung over water in areas frequented by skimmers.

You mention swifts, swallows and kingbirds as other species that have an unusual ability to avoid nets. Since swallows feed almost entirely in the open, nets must be placed in the open and operated only during calm weather; furthermore, we should not expect them to be effective except at dawn and dusk or during a heavy overcast -- conditions approximating the shade and camouflage we prescribe for netting "easy to catch" species. All of the 58 tree swallows that I banded in 1956 (EBBA NEWS 20:64) were taken in nets under such conditions. I think it is reasonable to attribute my very small chimney swift total to the fact that this species seldom flies low enough to hit the nets. I do not catch kingbirds at my home, largely, I believe, because I am surrounded by tall trees and the kingbirds generally stay high above the ground. By setting nets near some shrubs in a treeless area, however, I have netted as many as 5 Eastern Kingbirds in a single evening.

The only "evidence" you present of a species being netted just as easily in the sun as in the shade is in the case of wood thrushes, which "seem incapable of keeping out of nets whether the nets are in deep shade or the sunlight of open spaces." Several pairs of wood thrushes nest around my home, and I have had 131 captures in mist nets. I do not have figures on the number of captures in sunlight versus shade; but from a sample of 36 captures in 1955-57 on only those days when I was netting all day, I find that three-fourths of the birds were taken in five early morning or late afternoon hours as opposed to one-fourth in the ten intervening hours -- six times as many per hour near dawn and dusk. How much of the difference can be attributed to the normal increase in activity of the thrushes at dawn and dusk and how much to net visibility, I am unable to say; but the facts suggest strongly that sunlight on the nets makes a difference with the wood thrush just as it does with other species.

We know that various species react differently when a light is flashed in their eyes at night, and we should expect some differences in ability to see mist nets; but I am not convinced that conclusive evidence of the latter has been presented.

Since your thoughts have been thrown open for informal discussion, there are three minor points on which I should like to quibble with you. The conclusion that Empidonax flycatchers have "peculiar" vision, on grounds that they can see small insects in mid-air but are particularly helpless about avoiding nets seems unwarranted. I see no reason why a bird that detects small moving objects should be expected to avoid a well-concealed stationary mist net.

I must also take exception to the suggestion that the urge to reach "suitable protection from bright daylight" is the reason for over-water migrants seeking wooded cover instead of alighting on the first open or treeless terrain they encounter. More logical, I maintain, would be the

suggestion that they were seeking the particular habitat in which they are accustomed to finding appropriate food and shelter.

To set the record straight on some of the "strictly diurnal migrants" I'd like to point out that there are records of swallows, swifts and flickers migrating at night. Swallows have been detected several times at night in telescopic studies using the moon as a background. So have Chimney Swifts. There is also a published record of the latter species striking the Washington Monument at night. There are several instances of nocturnal Yellow-shafted Flicker fatalities (ceilmeter, TV tower and Washington Monument. ★ ★ ★

OUR BANDING TRICKS

By Dorothy L. Bordner (State College, Pa.)

Perhaps the one thing that we most often lack in our banding stations is, for want of a better term, imagination. It can happen to all, old as well as new banders. Once traps are placed, it is easy to fall into a rut and leave them in the same place even when they are not catching anything.

If perches are placed directly over the entrances to large all-purpose traps, fewer birds escape. Most birds will hop onto the perch as they go from one end of the trap to the other. Therefore, they don't run on the ground in a position to notice the opening.

We have used the small, ground opening, trip-step traps along with our large all-purpose traps with good results. The trip-steps work very well on the ground near our feeder in winter, but catch very few birds in the same position in other seasons. After watching birds walk all around the top of our all-purpose trap looking unsuccessfully for an entrance, we placed two trip-steps on it. We have caught many different species in these traps including several that we never got in the all-purpose trap. Also, placing a two-cell trip-step trap at the end of an all-purpose trap catches some birds that are too dumb (or smart) to find the entrances to the large trap.

Sometimes natural food will cause birds to concentrate in a certain area. For example, an early ripening cherry tree will bring in robins, catbirds, and others from blocks around. By placing traps under the tree and putting all the dropped fruit into the traps, a large percentage of these birds can be caught. We have extended the cherry season by freezing the wormy cherries (unseeded) and using them for bait after the fruit is gone from the tree. The frozen fruit will stay bright red colored for several hours and will attract birds for some time afterward. Wild cherries and choke cherries make good bait, too.

Many times, watching the behavior of birds in and around traps can suggest ways of increasing the efficiency of the trapping operation.

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